WHAT IS CLAIMED IS:

1. An aqueous composition for coating a set gypsum-containing material, said composition formed from at least:

water;

at least one monobasic phosphate salt;

at least one trimetaphosphate salt; and

at least one acyclic polyphosphate salt having at least three phosphate units.

2. The composition of claim 1, wherein the monobasic phosphate salt is selected from the group consisting of monoammonium phosphate, monosodium phosphate, monolithium phosphate, monopotassium phosphate, and combinations thereof.

3. The composition of claim 1, wherein the trimetaphosphate salt is selected from the group consisting of sodium trimetaphosphate, potassium trimetaphosphate, calcium trimetaphosphate, sodium calcium trimetaphosphate, ammonium trimetaphosphate, lithium trimetaphosphate, and combinations thereof.

4. The composition of claim 1, wherein the acyclic polyphosphate salt is soluble in water and is selected from the group consisting of sodium hexametaphosphate having from 6 to about 27 repeating phosphate units, potassium hexametaphosphate having from 6 to about 27 repeating phosphate units, ammonium hexametaphosphate having from 6 to about 27 repeating phosphate units, and combinations thereof.

5. The composition of claim 1, wherein the monobasic phosphate salt is monoammonium phosphate, the trimetaphosphate salt is sodium trimetaphosphate, and the acyclic polyphosphate salt is sodium hexametaphosphate having 6 to about 27 repeating phosphate units.

6. The composition of claim 1, wherein the monobasic phosphate salt is present in an amount of from about 1% to about 4% by weight of said composition, the trimetaphosphate salt is present in an amount of from about 1% to about 4% by weight of said composition, and the acyclic polyphosphate salt is present in an amount of from about 2% to about 8% by weight of said composition.

7. The composition of claim 1, wherein the composition is further formed from a polymer selected from the group consisting of a water dispersible polymer, a water soluble polymer, and combinations thereof.

8. The composition of claim 7, wherein the polymer is selected from the group consisting of acrylic latex, rubber latex, guar gum, sulfonated polystyrene latex, polyvinyl alcohol, polyvinyl acetate, and blends or combinations thereof.

9. The composition of claim 7, wherein the polymer is present in an amount of from about 0.1% to about 2% by weight of said composition.

10. The composition of claim 1, wherein the composition, when applied on the set gypsum-containing material, improves the

surface hardness of the set gypsum-containing material by at least about 15%, as compared with the set gypsum-containing material without the composition applied thereto.

11. The composition of claim 1, wherein the composition, when applied on the set gypsum-containing material, improves the flexural strength of the set gypsum-containing material by at least about 5%, as compared with the set gypsum-containing material without the composition applied thereto.

12. The composition of claim 1, wherein the composition, when applied on the set gypsum-containing material, improves the abrasion resistance of the set gypsum containing material by at least about 95% as compared with the set gypsum-containing material without the composition applied thereto.

13. The composition of claim 1, wherein the composition, when applied on the set gypsum-containing material, improves the water erosion resistance of the set gypsum-containing material by at least about 25%, as compared with the set gypsum-containing material without the composition applied thereto.

14. A method of treating a set gypsum-containing material comprising:

applying to said set gypsum-containing material at least one member from each of at least two of the following types of inorganic phosphate salts: monobasic phosphate salts, trimetaphosphate salts, and acyclic polyphosphate salts having at least three phosphate units.

15. The method of claim 14, wherein the inorganic phosphate salts are applied in amounts sufficient to impart the set gypsum-containing material with an improvement, as compared with the untreated set gypsum-containing material, in at least one characteristic selected from the group consisting of strength, surface hardness, abrasion resistance, water erosion resistance, and combinations thereof.

16. The method of claim 14, wherein the trimetaphosphate salt is selected from the group consisting of sodium trimetaphosphate, potassium trimetaphosphate, calcium trimetaphosphate, sodium calcium trimetaphosphate, ammonium trimetaphosphate, lithium trimetaphosphate, and combinations thereof.

17. The method of claim 14, wherein a composition is formed from the inorganic phosphate salts, which is then applied to the set gypsum-containing material.

18. The method of claim 17, wherein the composition comprises water.

19. The method of claim 18, wherein the composition is applied by way of spraying, dipping, spin coating, brushing, rolling, or combinations thereof.

20. The method of claim 18, wherein the composition is formed from at least one monobasic phosphate salt, at least one trimetaphosphate salt, and at least one acyclic polyphosphate salt having at least three phosphate units.

21. The method of claim 17, wherein the composition is further formed from a polymer selected from the group consisting of a water dispersible polymer, a water soluble polymer, and combinations thereof.

22. The method of claim 14, further comprising applying to the set gypsum-containing material a polymer selected from the group consisting of a water dispersible polymer, a water soluble polymer, and combinations thereof.

23. The method of claim 22, wherein the polymer is selected from the group consisting of acrylic latex, rubber latex, guar gum, sulfonated polystyrene latex, polyvinyl alcohol, polyvinyl acetate, and blends or combinations thereof.

24. The method of claim 14, wherein the monobasic phosphate salt is selected from the group consisting of monoammonium phosphate, monosodium phosphate, monolithium phosphate, monopotassium phosphate, and combinations thereof.

25. The method of claim 14, wherein the acyclic polyphosphate salt is soluble in water.

26. The method of claim 25, wherein the acyclic polyphosphate salt is selected from the group consisting of sodium hexametaphosphate having 6 to about 27 repeating phosphate units, potassium hexametaphosphate having 6 to about 27 repeating phosphate units, ammonium hexametaphosphate having 6 to about 27 repeating phosphate units, and combinations thereof.

27. The method of claim 14, wherein the monobasic phosphate salt is monoammonium phosphate, and the acyclic polyphosphate salt is sodium hexametaphosphate having 6 to about 27 repeating phosphate units.

28. The method of claim 14, wherein the set gypsum-containing material is applied with at least one monobasic phosphate salt and at least one of the following: a trimetaphosphate salt and an acyclic polyphosphate salt having at least three phosphate units.

29. The method of claim 14, wherein the set gypsum-containing material is applied with at least one acyclic polyphosphate salt having at least three phosphate units and at least one of the following: a trimetaphosphate salt and a monobasic phosphate salt.

30. The method of claim 14, wherein the set gypsum-containing material is applied with at least one monobasic phosphate salt, at least one acyclic polyphosphate salt having at least three phosphate units, and, optionally, at least one trimetaphosphate salt.

31. The method of claim 14, wherein the set gypsum-containing material comprises one or more fillers.

32. The method of claim 31, wherein the filler is selected from the group consisting of silica sand, hydrated lime, and blends or combinations thereof.

33. A method of making a set gypsum-containing material comprising:

forming a set gypsum matrix from water, calcined gypsum, and at least one trimetaphosphate salt; and

applying to the set gypsum matrix at least one inorganic phosphate salt selected from the group consisting of at least one monobasic phosphate salt and at least one acyclic polyphosphate salt having at least three phosphate units.

34. The method of claim 33, wherein at least one trimetaphosphate salt is applied to the set gypsum matrix.

35. The method of claim 34, wherein a polymer selected from the group consisting of a water dispersible polymer, a water soluble polymer, and combinations thereof is applied to the set gypsum matrix.

36. A set gypsum-containing material comprising a coating comprising the composition of claim 1.